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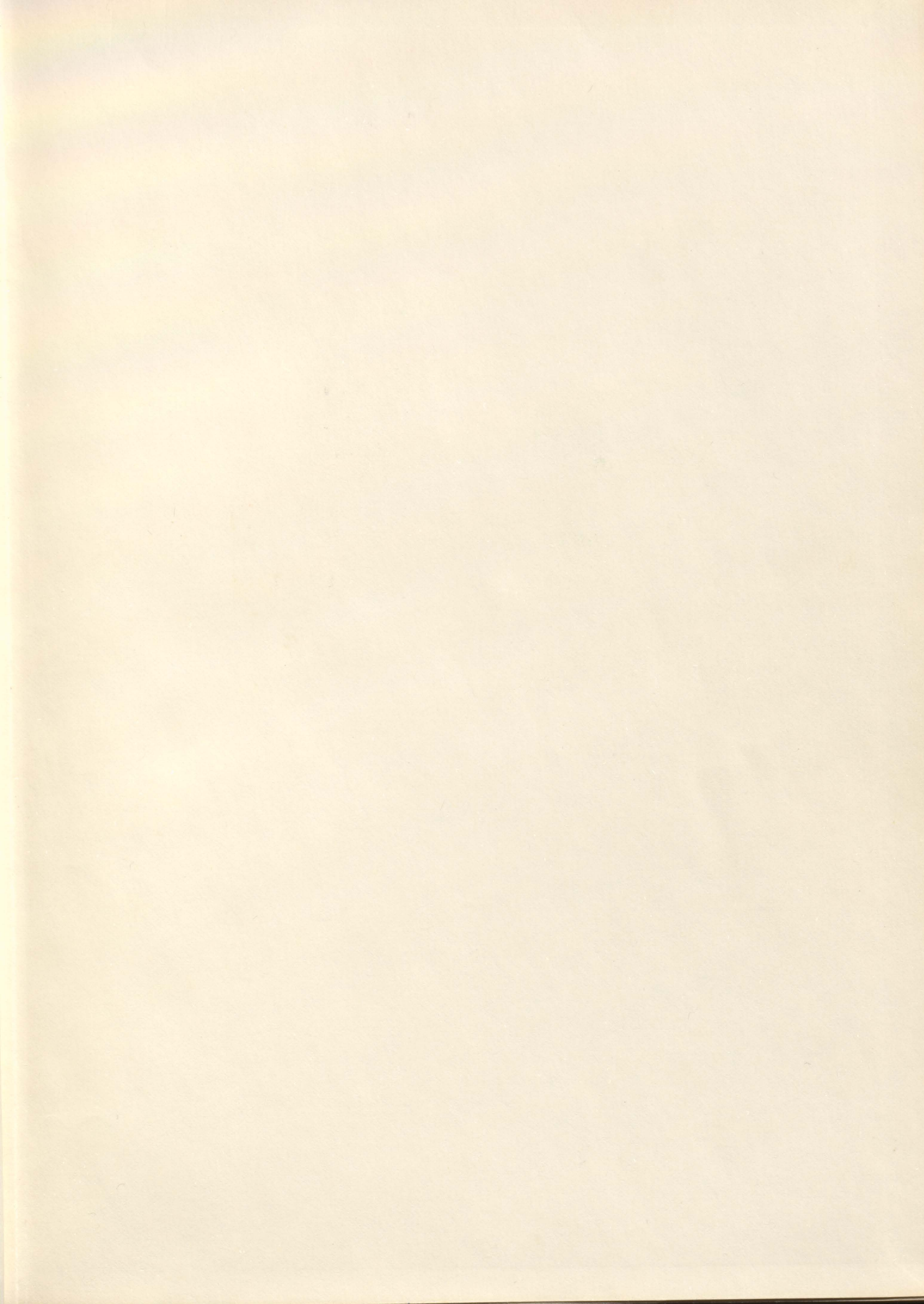
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The macdonald JOURNAL

JANUARY 1977





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THE macdonald Journal

JANUARY 1977

Macdonald Journal
Volume 38, No. 1
January, 1977

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In This Issue

Cover: Professor Lynn Forgrave explaining the principles of a horizontal silo to Diploma students. See article page 3.

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Journal Jottings

There are few Journal readers who do not know someone who has been a "Dip". "My brother was one," "My uncle", "Sue's sister", "Joe's cousin". All familiar comments heard often. Indeed, many of our readers are Diploma graduates themselves. They, as well as those unfamiliar with the program, will find Professor Lawson's article on the new Diploma in Agriculture Program of great interest. Many changes have taken place over the years, but the most recent developments are felt to be the best over! From just one afternoon spent with photographer Barry Burley following small groups of first year students — or, as they prefer to be called, "Little Dippers" —

as they received practical instruction in beef management, farm machinery, feeding, and milking, I would say that the answer to Professor Lawson's second question is "right here at Macdonald."

One of my most interesting afternoon's last summer was spent in informal conversation with Professor Tom Beveridge of the School of Food Science and Joan Habel of the Extension Department. We lost all concept of time and often wandered far from the subject, which was food, but, fortunately, we were taping our conversation. The result of that session was four articles, the first of which appears in this issue under the title "Amino Acids." The others will be published in future issues. I learned a great deal

during our discussion — I hope you will, too.

In the Family Farm section J. B. Roy discusses a recent trip he made to the United States — a trip in which he and his colleagues learned about present trends in American agriculture. He visited Iowa while there and tells us about farm operations in that state. I read this with particular interest because, as you will learn from reading the editorial, Gordon Bachman is leaving Macdonald to take up a new career in Iowa. Although we will miss Gordon's gentle reasoning and low-keyed but dedicated contribution to the College and the community, we wish him every success in his new endeavours.

Hazel M. Clarke.

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It's always difficult to say farewell, particularly when you have enjoyed your visit. But, as the old saying goes, "all good things must come to an end."

As you have probably sensed by now, I will no longer be writing my monthly editorial for the Macdonald Journal. This past fall I made a decision to leave Macdonald College to accept an Extension position with Iowa State University. It was a difficult decision to make as I was very fond of Macdonald College, but because of professional, personal, and a host of other reasons it was a decision I felt I had to take.

I want you to know that I have enjoyed tremendously my stay in Quebec and at Macdonald College. During my past five years at Macdonald, I have seen what I feel is a great change and improvement in the rural community. I suppose it takes an outsider to note this, but I have seen a remarkable change in many rural people and groups in Quebec. You people have done a tremendous job in developing your leadership abilities and communication skills. This is all in addition to your surge of interest, enthusiasm, and optimism over the future of the English-speaking rural community. Where once you may have sat around and wondered and wished something would happen or someone would do something, now you are going out and doing it yourselves and making it happen.

This to many is an almost invisible or intangible item, but to my way of thinking it is a most important one. It means that you are not

satisfied with where you are and are willing and determined to do something about it. It is a quality that can not easily be acquired, inherited, or purchased. It must be developed and earned through initiative, hard work, and dedication to a cause.

It is this characteristic that leaves me very encouraged over the future of rural Quebec. I have enjoyed working with many of you over the past few years and I wish to each of you the best in the future. Thank you for being a great audience.

Gordon Bachman

The New Diploma in Agriculture Program at Macdonald

by Professor N. C. Lawson
Director

Who will grow tomorrow's food?
Where are the future Canadian
young farm operators and man-
agers to be found? What kind of
technological education will they
require to cope with the unknown
future problems? Can fathers
train their sons adequately for a
future in farming?

These and other questions have
perturbed agricultural educators
in Canada since the foundation
of our Colleges and Faculties of
Agriculture. The questions have
remained the same for a century;
however, different times require
different solutions.

When the first agricultural
students enrolled in 1907 at Mac-
donald they completed a highly
practical two-year Diploma pro-
gram. The budding future scientists
then spent another two years
elving into the mysteries and
complexities of the known natural
sciences of the day, in order to
obtain the Bachelor of Science
in Agriculture degree.

Through the years it became clear
that in post-secondary or higher
agricultural education a three-
tier system was effective. Those
persons who aspired to practical
farming and directly associated
positions would benefit greatly
from a two-year post-secondary
Diploma in Agriculture program.
Those aspiring toward being
professionals working with the
agricultural industry would benefit
best by a scientific training leading
to the Bachelor of Science in
Agriculture degree. A relatively
small number of post-graduates

desiring careers in research and
University teaching were accom-
modated by programs leading to
Master of Science and Doctor
of Philosophy degrees.

In the 70 years during which these
programs were planned and have
evolved, we have encountered
two world wars, a world-wide
economic depression, social, eco-
nomic, and political upheavals,
an explosive birthrate, apparently
uncontrollable fluctuations in
world and Canadian food supplies,
as well as near chaos in the

"Tomorrow's illiterate will
not be the man who can't
read;
he will be the man who has
not learned how to learn."
Alvin Toffler
Future Shock

pricing and marketing of food
commodities. In Canada most of
the rural population has migrated
to urban centres. The populace
in general has great expectations
for an affluent future while we
hear disturbing discussions about
counter-culture movements and
alternative life-styles.

The Faculty of Agriculture at Mac-
donald has always been in the
forefront in moulding and modify-
ing the educational offerings to
suit the changing needs of society
during these seven historic
decades. Now on the threshold
of our eighth decade of develop-
ment more profound changes
have been introduced.

The CEGEP system was introduced
by the Ministry of Education for
Quebec (MEQ) several years ago

and was designed to provide
general education between high
school and university as well as
providing technical and vocational
training for those people not
wanting to proceed to University.
The question arose as to whether
or not the CEGEP was the logical
and best place for agricultural
diploma training. A major con-
fusing factor was the thought
expressed in some quarters that
an English-language Faculty of
Agriculture was unnecessary in
Quebec. Another viewpoint urged
the movement of the Faculty from
the suburban campus with its
fields, farm, and forest to the
downtown campus, where possible
economies in operating expenses
might be possible.

During 1974 an interministerial
committee met several times in
Quebec City. This consisted of
representatives from the Ministry
of Agriculture and the Ministry of
Education as well as Macdonald
College. Early in 1975 the decision
was reached that the Diploma in
Agriculture program should con-
tinue to be taught at Macdonald
College and that the financial
sponsorship would be undertaken
by the Ministry of Agriculture for
Quebec. This meant that two
French-language programs would
be offered by the Ministry of
Education at CEGEPS, one at Alma,
one at Victoriaville. Two French-
language programs would continue
to be offered by the Ministry of
Agriculture in the Instituts de
technologie agricoles, one at St-
Hyacinthe and one at La Pocatière.
In addition, there would be the
English-language Diploma in
Agriculture program at the Mac-
donald campus under the sponsor-
ship of the Ministry of Agriculture
for Quebec.

This good news was welcomed by all members of the Macdonald community as being the needed opportunity to develop a Diploma program that would be second to none in Canada.

A prime necessity is to be able to define the educational objectives of the program. We believe this to be the education and training of individuals to be competent and successful operators and managers of commercial farms under Canadian soil, climatic, and economic conditions. This is a very ambitious objective and the successful realization of it depends on many factors. Good academic standing of the potential student completing high school is essential. Secondary 5 (Grade 11 Quebec) graduation is necessary, with credit for Mathematics, Chemistry, Biology, and Physics. The student's progress and ability to deal with the academic work load at Macdonald depends on maturity, motivation, ambition, and application. The quantity and quality of farm experience before entry to the program is also important. We only have two years to convey the great complexity of modern agricultural science and practice into the minds of these potential managers. We can anticipate that on graduation our most successful diploma students will be able to operate and financially manage farms. Another category of student would be able to plan and operate a part of a complex production unit while others, still lacking experience and confidence, will be able to serve as skilled assistants on the farm. Past experience shows that people with good diploma level training are highly employable in a range of technical, sales, and administrative categories in the many businesses and government agencies related to agriculture.

The New Syllabus

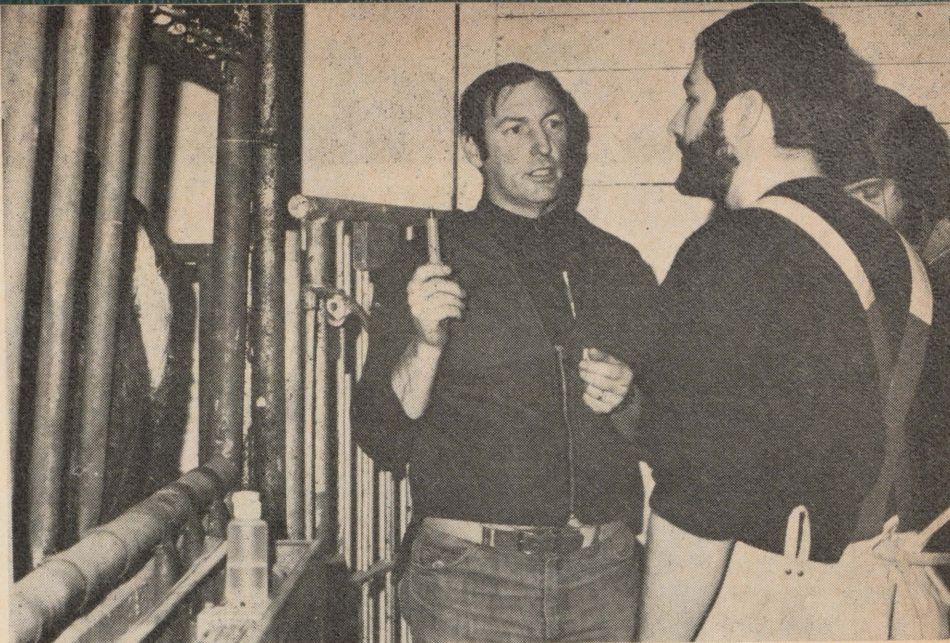
Any program must be a compromise between the time available and the many technical subjects that are considered as essential. As agriculture is a practical skill and an art, it was felt that "farm practice" should be built in as an integral part of the program. This requires the active cooperation of our first class Quebec farmers who are needed to train the potential farmers of tomorrow. All students while enrolled in the academic program will spend two 15-week summer terms as trainee students under the guidance of some of the best farmers who are willing to cooperate with us in this pro-

ject. The training farmer may have to exercise considerable patience and tolerance as indeed do all good teachers and professors when dealing with students who do not understand immediately. The training farmer's reward will come when the student suddenly exhibits talents hitherto undivulged! The success of this practical summer training as an important formative process depends on the good will and enthusiasm of the Quebec farmer who is now going to have an input in the training of his replacement. We are looking forward to some first class cooperation in the years to come. In the summer of 1976, 21 students were placed as trainees on southwest Quebec



First-year students learn methods of fly control for beef animals.

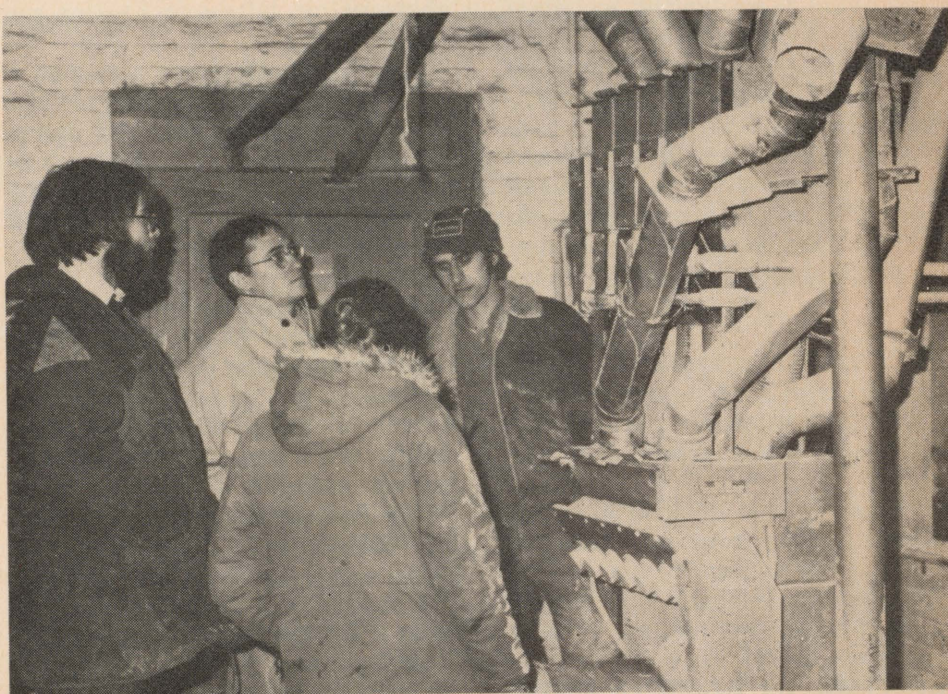
Top: Professor Forgrave explains the proper methods for routine injections of farm animals. Below: Dennis Hatcher, right, of the College Farm staff, demonstrates the practical application of feed formula to a group of students.



farms. This gave everybody an opportunity to assess the problems that may and do arise. In the summer of 1977 we anticipate requiring 50 training farmers and farms for the first year students. In the summer of 1978 we may require 110 training farmers for first and second year students.

Students who go out on the practical training program during their first summer term will vary a great deal in their practical knowledge. Many who have spent most of their lives on a farm will already have a command of the basic skills. Nowadays an increasing number of diploma students have urban backgrounds. We still insist that these students have a minimum of one summer (four months) before they enrol for our program but often the quality of experience they obtain is poor. In the first term of first year, all students will take a new course called "Introduction to Farm Practice". A number of tasks and skills related to crop production, machinery handling, and animal management are carried out in small groups using the practical facilities to be found on the Macdonald farm and research station. Emphasis in this course is given to the "hands on" as opposed to the "hands off" method. Students need this opportunity to be allowed to do things under careful supervision. Personal safety is emphasized at all times, as also is the need not to abuse the livestock, the land, and the machinery that is being used.

A vast amount of time and thought has gone into the design of the new program. Four major disciplines: Plant Sciences, Animal Science, Agricultural Engineering, and Agricultural Economics make up the essential core of the program. In second year students have a choice of electives that allow special interests to be developed and caters for the small but increasingly important group who want to know more about horticultural production.



Most departments at Macdonald contribute one or more courses to build up a comprehensive structure that should enable the student to understand some of the scientific background for today's technology. More than that, the student needs to acquire the self-discipline and curiosity that will enable him or her to survive, appreciate, understand, and utilize the technological innovations that will surely occur during the working lifetime.

Furthermore, the farm unit as a competitive business, able to prosper in the mysterious marketplace of Canada and the world, becomes the central theme for the new graduates of the new program. It is possible to love the

land, believe in the central importance of the continuation of the family farm and also to act and react as any other astute, pin-stripe suited, business man can when faced with the changing world market. Financial management is emphasized.

We are extremely fortunate at Macdonald to have a Faculty of Agriculture made up of scholars many of whom are known nationally and internationally for their contribution to agricultural and biological sciences. Students who come to Macdonald to enrol in the Diploma Program can be assured of a challenging and stimulating program designed to prepare them for the years that lie ahead.



Gordie Beaulieu, herdsman, teaching one of the girl Dips proper milking techniques.

FIRST YEAR

Term 1 (Fall)

SUBJECT	HOURS
Introduction to Farm Practice	60
Economics of Canadian Agriculture & Marketing	60
Tractors and Field Machinery	60
Animal Anatomy & Physiology	60
Nutrition, Breeding, & Health	75
Agricultural Climatology	15
Hay & Pasture Crops	60
Soil Science	60
Total	450

Term 2 (Winter)

Farm Project 1	15
Farm Records & Analysis	60
Introduction to Building & Electrification	60
Dairy Cattle Production	75
Communications	30
Agricultural Zoology	60
Agricultural Botany	60
Grain & Miscellaneous Crops	60
General Horticulture	30
Total	450

Term 3 (Summer)

Farm Practice 1	600
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SECOND YEAR

Term 1 (Fall)

SUBJECT	HOURS
Farm Project 2	30
Farm Management 1	60
Land Measurement & Water Control	60
Poultry & Beef Production	75
Weeds & Weed Control	60
Extension Methods & Rural Development	45
A MINIMUM	
OF TWO ELECTIVES FROM:	
Vegetable Cash Crops	60
Fruit Cash Crops	60
Bees & Beekeeping	60
Farm Forestry	60
Total	450

Term 2 (Winter)

Farm Project 3	30
Farm Management 2	60
Machinery & Building Management	60
Swine & Other Species	75
Agricultural Microbiology	45
Crop Management	60
A MINIMUM	
OF TWO ELECTIVES FROM:	
Commercial Ornamental Horticulture	60
Commercial Handling of Horticulture Products	60
Shop Practice	60
Seed Production, Processing & Analysis	60
Total	450

Term 3 (Summer)

Farm Practice 2	600
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DIPLOMA IN AGRICULTURE PROGRAM

SYLLABUS EFFECTIVE SEPT. 1976

Amino Acids

(Professor Tom Beveridge of the School of Food Science discusses amino acids.)

What are amino acids?

Amino acids are simply chemicals. They are small molecules made up mainly of carbon, nitrogen, and hydrogen. There are roughly 20 amino acids that normally occur in proteins. If you consider the amino acids as a "brick", then a series of these "bricks" joined together give you a protein. The protein can be 20 to 30 of these amino acids or up to several hundred of them strung together on a chain.

A large percentage of the structure of our body is built from protein. The chemical reactions that go on in our body are mediated by enzymes. Those enzymes are proteins, thus we have a large requirement for protein in our body. Now we can acquire the amino acids required to make this protein either by obtaining them in our diet or by making them within our body. In the process of digestion we eat protein foods and the "bricks" are split out of the protein and are absorbed as individual amino acids. Our body then proceeds to put them back together again into proteins which are specific to each individual body. If the body needs hair, it builds the protein which makes the hair. We must eat protein foods in order to supply the basic amino acids for building the basis of our bodies.

What foods have complete proteins?

First let's go back a bit. I mentioned that we had only two ways of getting amino acids in our bodies — absorbing them from our food and making them. The

human body can make all the amino acids it requires except eight — isoleucine, leucine, lysine, methionine, phenylalanine, theonine, tryptophane, valine, and, in infants, histidine. These must be supplied by the food and are termed essential amino acids.

A so-called complete protein is a protein which supplies essential amino acids as part of the protein in the food; an incomplete protein will be one which supplies some of them in very limited quantities. There are few proteins that are totally incomplete, most contain some of the so-called essential amino acids but incomplete proteins have them at levels which do not meet human requirements when fed as the only protein source. We require a certain level of protein which supplies our essential amino acid needs and enough nitrogen from which to synthesize the non-essential amino acids. A simple answer is that all the essential amino acids are in the proteins which are supplied from animal sources — milk, cheese, meat, fish, poultry, eggs.

The so-called incomplete proteins tend to be supplied by the plant world. Cereals are deficient in lysine, soybeans tend to be low in methionine. However, by appropriate selection of plant proteins, you can balance them out. I mentioned soybean and cereal proteins such as wheat. If you get the proper mix of the two, the nutritional value of the mixture will be better than either of the sources. Currently under study is wheat flour which is lysine deficient. Soybeans are methionine deficient but if you combine the two, the lysine in soybeans and the methionine in wheat complement one another and the bread made from the mix has a higher nutritional value from a

protein point of view than the original wheat bread.

I realize that many women are making their own bread; therefore, I would like to add a word of caution. They could run into some technical difficulties if they use too much soybean flour, as it does not produce the gluten or gas-holding power of ordinary bread dough. This could decrease the volume of the bread, producing heavy loaves. I have seen claims that you can get 12 per cent soybean into your flour, but I think six or seven per cent would be more realistic.

Could you explain the fact that when a person eats food that is low in one amino acid, it lowers the usable level of the others?

Let's go back to our "bricks". Suppose you were going to build a wall out of red bricks and yellow bricks in a certain pattern. Clearly we can only build that wall to the point where we have run out of one of the colours. If we run out of yellow bricks, we can have the greatest pile of red bricks sitting in the back yard, but we cannot build the wall any further. If we can supply a few more yellow bricks, we can use more of the red ones and continue to build the wall. In the same way, we can only build our proteins until we run out of those essential amino acids, and at that point we have to stop. Even though we may be supplying all sorts of protein, if we are not supplying the essential amino acids, the protein cannot be utilized for the production of protein in our bodies. It is burnt as energy but starches are much cheaper and more efficient sources of energy.

Macdonald Reports

by Joan Habel

PARASITIC DISEASE RESEARCH ON FARMS

One of the best things about writing Macdonald Reports is visiting different departments to ask "What's new?". From a purely selfish point of view, an hour spent talking with researchers on campus can be one of the most interesting hours of a week. Passing information on, as a Mac Report, may help to give readers a chance to glimpse research being done which may eventually improve their standard of living.

Neil Croll, Director of McGill's Institute of Parasitology, located on Macdonald Campus, described what's new as a joint research project with the University of Laval — working in the area of parasitic diseases, scientists are studying the health of both families and herds on a cross-section of Quebec farms, to try to relate the lifestyles and habits of people in rural Quebec (mostly farm families) to the incidence of this type of illness.

There is every indication that rural people have more parasitic diseases than people living in the city. The reasons for this are readily understandable — contact with livestock, both in physical handling and eaten as uninspected meat contributes largely to the infection of families. In winter, there is the additional problem of working with animals which are confined indoors at close quarters. Another contributing factor is a lower standard of hygiene on some farms. Water supplies can be contaminated by manure; sanitation systems may be improperly installed or inadequate.

Twenty parasites causing 20 different diseases are being examined in the survey, which will take two years to complete. The field team, from Laval, are visiting 400 farms, assisting farmers to fill out questionnaires and collecting blood and stool samples from every animal and person on each farm; further assistance is being given by local veterinarians. The samples are sent to Macdonald College where another research team, under the direction of Dr. Charles Tanner, does the

analyses, which run into tens of thousands of tests.

The tests turn up on-farm diseases such as cysticercosis, or beef tapeworm, which inhabits both cattle and man in its different stages. The larvae live in beef muscles, and if a human eats infected meat, his intestines may harbour the adult stage, a flat, ribbon-like tapeworm about 10 feet long. In turn it lays eggs, which, where sanitation is substandard, may reinfect the cattle — the cycle goes round again. The cows can pick up the disease only from humans, who are the hosts for the adult tapeworm. Although not a killer, this disease reduces the health standard of both livestock and the farm family. Meat infected with tapeworm larvae is condemned in reputable commercial abattoirs and used as cooked feed for pets and non-human consumption. The fish tapeworm of man is a closely related parasite which can reach lengths of 40 feet and is contacted from eating fish such as pike, lake trout and char.

(Continued from page 7.)

What combinations of foods would result in complete proteins?

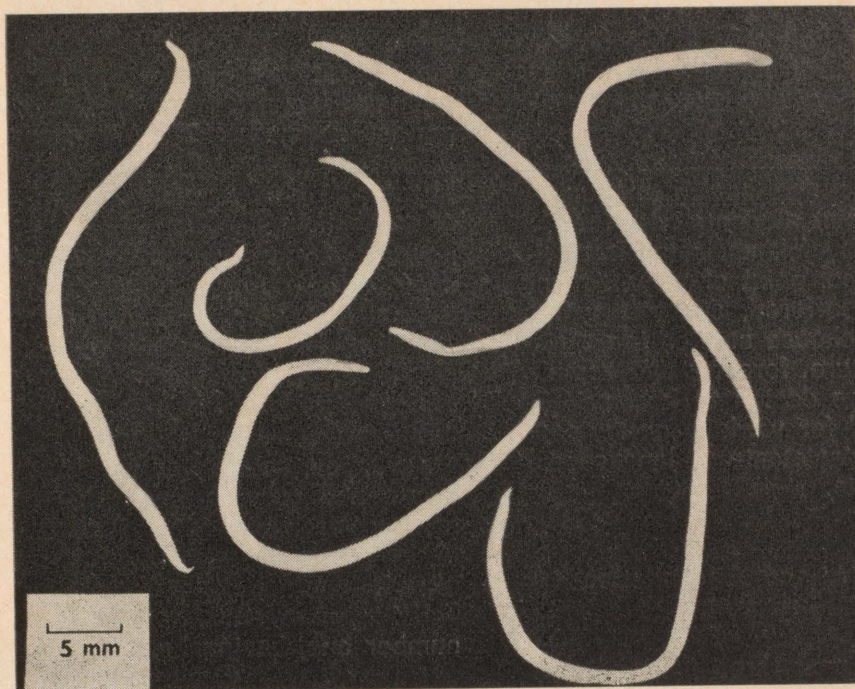
If your child has a glass of milk and a peanut butter sandwich for lunch, he is getting complete proteins. He is supplying two things from the sandwich: a reasonably decent protein and his energy requirements from the starch, and the milk supplies the essential amino acids from the animal sources. Other combinations would be: macaroni and

cheese, baked beans with pork, cereals and milk, rice pudding, even pizza. There are many more combinations, but you will notice they will all include a little animal protein in some form. Rice pudding, for instance, has rice as the cereal and milk and perhaps eggs for the animal protein. It is possible, however, to obtain an adequate protein supply from plant sources by careful selection of a variety of plant foods. This, of course, is done by many vegetarians.

To sum up, protein is not a problem in Canada. The general population, if anything, is overfed in protein. This is not really surprising when one considers the amount of meat, milk, and eggs that are available and which most of us use regularly. It is important, however, to remember that man does not live by protein alone and that meals should be nutritionally balanced for all nutrients including the essential amino acids.

another serious disease is trichinosis, caused by the trichina muscle roundworm). While previously a problem in connection with the pork industry, modern wine operations use plant product feeds and the pigs do not usually harbour these parasites. The main carrier now is bear meat — in several regions of the province, the annual bear hunt is a major source of food and festivity and last year 68 cases of trichinosis were reported in Quebec, resulting in a few deaths. Home-raised and slaughtered pigs should be carefully fed, housing should be clean and free from rats (rats eat all manner of garbage and the pigs eat the rats!), and pork should be cooked well-done.

The common roundworm of dogs can also infect people and may cause very severe problems in children. A pregnant bitch harbouring this parasite will pass it on to her young through the placenta. Children, who tend to live in a puzzling harmony with their puppies (or kittens), may contact common roundworms of dogs. For 10 or 12 years they may appear to cause little damage; then at puberty the worms migrate in the

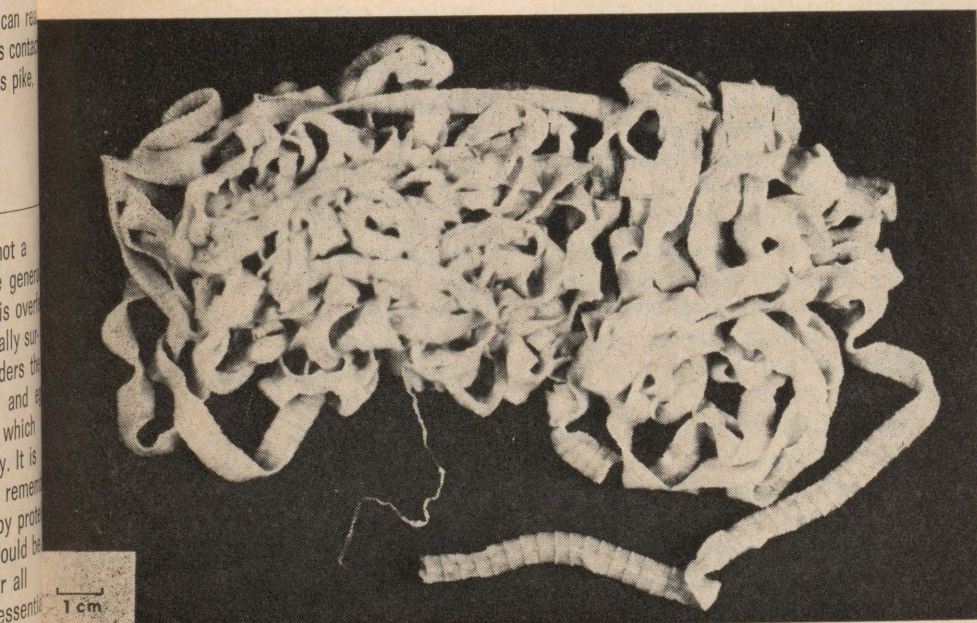


Common roundworm of dogs.

body and may cause blindness, brain damage, and mental disorders.

A research grant of \$100,000 from the federal Ministry of Health and Welfare makes possible this extensive research project, which is part of a study from Ontario through to the Maritimes. The goal is to raise standards of living on some farms by understanding the rural habits which predispose people to parasitic diseases and then to outline recommendations for improvements which are based on fact.

Researchers at the College would welcome the cooperation of rural people who have had the experience of diagnosed parasites in humans on their farms; the information you could offer would be very valuable. Please contact Theresa Gyorkos, Information Scientist, Institute of Parasitology, Macdonald College, P.Q. H0A 1C0. Telephone 514/457-6580, local 176.



Fish tapeworm of man.

NEW LANDSCAPE MAJOR

A student at Macdonald College can now work toward a Bachelor of Science in Agriculture, specializing in landscaping.

The Department of Renewable Resources has set up this major to acquaint students with the problems of landscaping from a practical point of view. Among courses offered, students will be able to choose studies in soils, horticulture, forestry and some landscape design to become qualified for work in nurseries and as assistants to landscape architects.

Herbicides and the Pollution of the Environment

For the past three years, Derek Muir, a graduate student in the Department of Agricultural Chemistry, has conducted experiments on the contribution made by certain agricultural pesticides to environmental pollution. Studies were conducted on Macdonald College farm and, in 1975, in the Yamaska River basin.

At the College farm, four corn herbicides, atrazine, Bladex, Outfox and Lexone — and Sencor (usually recommended on soybeans, but for this experiment also used on corn) were applied at the recommended rate on tile-drained cornfields. The purpose was twofold:

1. to see how much of each herbicide leached one meter depth into the tile drain water and which times of the year had the highest rates.
2. to measure how much herbicide carried over the following season in Quebec's climate.

Researchers made many interesting observations. In the 12 months after application, atrazine and Sencor leached the most under field conditions — 0.2 per cent of the total quantity applied to the field, while Bladex

and Outfox registered 0.1 per cent of the total application. The levels of herbicide found in the tile drain water were surprisingly high, at 1-10 parts per billion, with the highest amounts in spring, when there are high flow rates (snow melt, etc.). On the Macdonald farm, where the level of application of atrazine is 2½ pounds per acre, about 10 per cent of the atrazine remained in the soil 12 months later. But over the three years, researchers were able to show that the rate of disappearance was related to soil temperature — more herbicide stays in the soil during a cold summer. If our climate were colder, atrazine and Outfox probably could not be used at all. The other herbicides disappeared in half the time — Bladex scored number one, having both the advantages of faster rate of disappearance and less leaching.

The second group of studies covered agricultural land surrounding five watersheds draining into the Yamaska River. In these rivers, all flowing through farmers' cornfields sprayed with atrazine, levels of from one to 26 parts per billion of atrazine were found, with the highest concentrations in June and July. It is felt that a combination of spraydrift, surface run-off and washing spray equipment could have contributed to this pollution.

The findings of the research suggest several practical ideas which could help the farmer in the management of his farm: 1. Although the five herbicides studied are not particularly toxic, and the concentrations found in both the tile drain and river waters pose no known danger to drinking water for livestock or humans, other chemicals, such as DDT or chlorinated insecticides, are so highly toxic they are dangerous at levels of 1-10 parts per trillion. It cannot be over-emphasized that farmers should develop good habits of spraying all chemicals on their fields. These could include

the use of nozzles which spray a larger droplet size to help to control spraydrift, and careful washing of equipment, at a distance from rivers and wells.

2. In the year after a cold summer a farmer could probably apply slightly lower applications of these herbicides to his cornfields.

3. When a grower wishes to change from corn to another crop, if there is concern about atrazine or other herbicide residue in the soil, he could have the appropriate soil analyses made, or could run the following simple test on his own farm: take a good soil sample mixture from both on top of and between the furrows — plant either an atrazine sensitive crop (such as oats) or the one he wishes to grow, in the samples — and watch carefully to see if growth problems occur in the experimental crop.

The Department of Agricultural Chemistry and Physics invites inquiries from farmers on this subject. Please contact either Prof. B. E. Baker or Derek Muir, Box 223, Macdonald College, P.O. H0A 1C0 or telephone 514/457-6580, local 269.

"PEOPLE" CAREERS IN RURAL COMMUNITIES

At Macdonald College there are several avenues of study which are not specifically oriented toward careers in what we might call the obvious agricultural sciences, i.e., plant sciences, animal sciences, soil science, etc. A good example is the Community Resource Development major, comprising a specialized group of courses which prepare students to work as "people people", professional resource persons in all types of rural communities.

Interest in this field first arose several years ago in the United States; in the 1960s it grew out of the area of purely agricultural

extension work in order to provide much needed services for the physical, social, and economic well-being of the rural communities.

In Canada, the transformation from traditional agricultural extension work to community development began under ARDA (the federal Agricultural Rehabilitation and Development Act, June 1961). People trained in the social sciences were employed in many programs, such as the "l'Animation Sociale" project in the Gaspé area and the "NewStart" programs, directed at disadvantaged rural groups in several provinces.

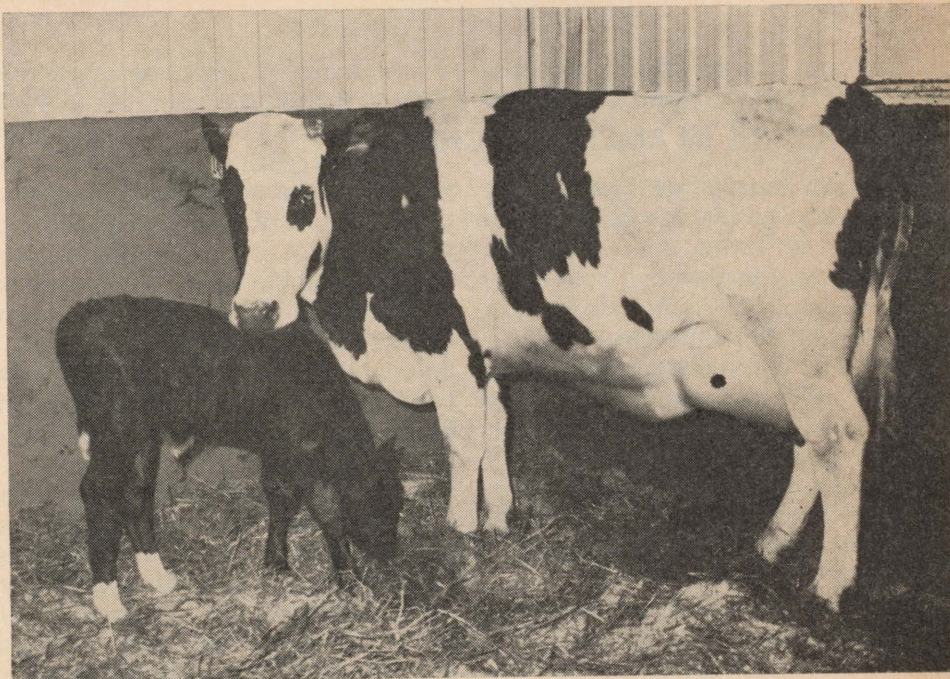
Men and women who have combined knowledge of agricultural sciences, social sciences, and economics are particularly well suited for this work in the rural communities. While undergraduates, they study three types of courses to obtain their degree, which is a Bachelor of Science (Agriculture) in Renewable Resources Development:

1. basic agricultural courses, such as plant and animal sciences; soil science; ecology; forest resources;
2. social sciences and allied courses. These include resource economics; sociology courses — rural sociology; community development; agriculture, food and resource policy; recreation resources management.
3. communications courses. Graduates should have gained a better understanding of the nature of rural communities in order to promote in their work the full development of local resources, both human and physical.

If programs in rural areas continue and expand, job opportunities should be excellent; students may be employed by governments, the communications media, and recently, industries settling in the far north.

Inquiries about the Community Resources Development major will be welcomed by Professor Micheline Chevrier, Department of

Renewable Resources, Macdonald College, P.Q. H0A 1C0. Telephone 514/457-6580, local 267.



New Breakthrough in Embryo Transfer

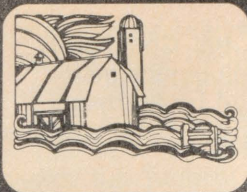
On Thursday, December 16, 1976, an 86-pound heifer calf was born on the Macdonald College Farm. Although it appeared to be no different from all of the other calves there, this calf was special — as a six-day-old embryo, it had been frozen and stored at -196°C in liquid nitrogen. Ninety-eight days later, it was thawed and transferred to the uterus of the cow that was to become its foster mother. The first calf produced from a frozen embryo in North America was born in only July of this year; the Macdonald calf represents the third such animal and is the first one to be born in Quebec.

The freezing program at Macdonald was developed and carried out by Lynn Forgrave and Neil Segal as part of their graduate studies. The recent success came from an embryo frozen by Mr. Segal on

December 10, 1975. On March 17, 1976, it was thawed and surgically transferred to the uterus of a Holstein recipient heifer by Dr. B. R. Downey, veterinarian on the research team. The calf, a cross-bred Limousin, was born without difficulty.

When embryos can be successfully frozen and thawed with resultant good fertility, a giant step forward will have been made for agriculture and the animal industry. For example, international exportation of valuable Canadian bloodlines may take place as embryos in an ampule rather than as a carload of cattle. Further research developments which may also have a profound effect on the industry include simplified recovery and transfer techniques and successful sex determination of embryos. A more complete story of the techniques of embryo transfer can be found in the Macdonald Journal, April, 1975.

The Family Farm



Published in the interests of the farmers of the province by the Quebec Department of Agriculture



THIRD WORLD CONGRESS OF AGRICULTURAL JOURNALISTS IN AMES AND CHICAGO

(Farming in the United States as seen by Quebec Journalists)

by J. B. Roy, Agronome

The Third World Congress of Agricultural Journalists from July 1-9, 1976, opened at Ames University (Iowa) where during the three days conferees were brought up-to-date on present trends in American agriculture in connection with the main theme "ONE WORLD: LET'S TRADE". On July 4, Independence Day and the Bicentenary of the United States, visitors enjoyed a tour of farming operations and a special luncheon organized by Iowa farmers. On Monday, July 5, the convention took to the road, with participating journalists dividing into two groups for a four-day trip to the West to take a look mainly at livestock raising and crop production in Iowa and Nebraska, or to the East to tour dairy farms in Wisconsin. On July 9 delegates converged at Palmer House, Chicago, for the closing luncheon.

Organization and Participation

This Third World Congress, like the two previous ones held in Montreal in 1967 and in Cannes and Paris in 1971, was organized by the American Agricultural Editor's Association (AAEA), under the auspices of the International Federation of Agricultural Journalists (IFAJ). There were 223 conferees from 23 countries: West Germany, had the strongest representation with 23 delegates and was followed by Japan with 16, Canada and Belgium each

with 9 and France with 8. Several delegates were accompanied by their wives.

Five members from Quebec helped to make up the Canadian delegation. They included Gustave Larocque (Radio-Canada), Roger Blais (Agrex Publicité Inc.), Gérard Vincent (Le Coopérateur agricole et l'Aviculteur Québécois), L. P. Phaneuf (La Revue Vétérinaire Canadienne), and Jean-Baptiste Roy (Agriculture Québec).

Some 60 agricultural and related enterprises, in addition to 36 publications and members of the AAEA made financial or other contributions to the excellent organization of this Congress. Donations and subscriptions enabled organizers to provide delegates with meals, accommodations, transportation, and documentation throughout their stay in the United States, from Ames to Chicago, with no other expenses than registration fees.

I. The Delegates at Ames

The opening ceremonies were presided over by the president of the IFAJ, Dr. Vittorio Cervi of Italy. In his welcome address, he emphasized the importance of the Third World Congress which gave journalists the opportunity to discuss the best means of production and avoid pollution and unnecessary surpluses in order to adequately feed the human race in the midst of a population explosion. Dr. Cervi concluded by reminding journalists of their responsibility towards their read-

ers in explaining to them the particular approaches taken.

"America and the American Farmer"

This multi-screen presentation at the start of the Congress depicted the farmer's role over the past 200 years in the United States and illustrated the continued importance of agriculture in the economy of the country. Two centuries ago, nine out of 10 Americans were farmers. They created a free and thriving nation. Despite the evolution of the past 50 years, crop and livestock productions take up more than half billion acres. With a gross revenue of more than \$100 billion, farming is big business. It is the mainstay of a food and agricultural industry of some \$165 billion per year.

Terms which best define and summarize today's agriculture are mechanization, technology, capitalization, production, marketing, efficiency. Farms are becoming fewer in number but larger in area. Less than half a per cent of all the farms in the United States are incorporated. A farmer can work an acre of land in less than 100 minutes and produce 25 kilos of corn in less than five minutes. A farm worker feeds himself and 56 other people at the same time. The yield of one out of every three acres is exported. In 1975 the value of farm products exported by the U.S. amounted to \$20 billion which helped to counterbalance a deficit of \$10 billion in non-agricultural trade.

The following figures indicate in millions of acres the area of

and devoted to major field crops in 1975: cotton, 3.3; tobacco, 1.4; all-purpose corn, 32.2; winter wheat, 21.4; hay, 25.7; oats, 5.7; peanuts, 0.6; potatoes, 0.6; soybeans, 20.8; sorghum, 6.6; and rice, 1.2.

In 1976 cattle on American farms totalled 128 million, including 47 million beef cattle and 11 million dairy cattle. Other livestock included 48 million hogs, 13 million sheep and lambs, 379 million chickens (excluding commercial broiler chickens) and 124 million live turkeys.

Relatively recent, American agriculture has not been subjected to a long-standing tradition which for centuries in Europe has determined the size and extent of fields, the layout of roads, and the site of buildings. The temperament of American farmers has from the start been characterized by a greater openness to innovations and to accompanying risks.

Present Orientation of American Agriculture

The main item of the first day of the Congress was presented by the Honourable Earl L. Butz, who was at the time U.S. Secretary of Agriculture. For the benefit of the journalists, he indicated the present orientation of American agricultural policy. The following are the main features of his address:

The increase in agricultural products which the world will require to feed its population in the coming years, will for the most part, occur in the United States. This country intends to meet these expectations through

a policy of abundant production distributed through normal channels of free trade. This orientation which, since 1970, has formed the basis of new U.S. agricultural policies has brought about changes in farmers' behaviour and in the building up of grain stocks.

How have these changes come about? The United States has gone from a period of high support of domestic prices, to one of orientation towards market prices; from lowered production determined by fixed quotas, to unlimited production; from agriculture's heavy dependence on the State, to a dependence on markets; from very tight government controls, to reduced or non-existent controls; from very important national stocks, to fast-diminishing reserves; from moderate exports, to an important participation in agricultural world trade.

Owing to this reversal which for the United States signifies the progressive abandonment of controls, restrictions, quotas, and subsidies, American farmers today are producing more than ever before, with 1975 yields amounting to 5.8 billion bushels of corn and 2.1 billion bushels of wheat. Last July it was predicted that the country would have one of the biggest harvests ever recorded in its 200-year history. According to the Secretary of Agriculture, farmers who are now left to make their own decisions are making more rational use of their land than in the past 40 years.

The trend of agriculture in the United States towards full production is profitable not only to

domestic producers and consumers but also to foreign consumers of American farm products. Free trade and an exchange of information amongst all nations will lead to the best system of grain storage in the world. Mr. Butz concluded by emphasizing the importance of circulating agricultural information throughout the world. All nations will have to share their most up-to-date knowledge of agriculture and marketing. It is agricultural journalists who must assume the responsibility of their respective country to ensure that this is done.

One World: Let's Trade

The study session of July 2 centred on the main theme of "One World: Let's Trade". In the morning, three speakers representing three different categories of producers said that they could produce if —

The first to speak was Seymour Johnson, President of the American Soybean Association. He began by outlining the situation and listing the advantages of present soybean production in the United States and then held out the bright prospects of its unexplored potential.

At present, the U.S. devotes 21 million acres to soybean farming. From 1940 to 1973, production increased from 2.1 to 41 million tons and it is expected to climb to 54 million by 1980. Soybeans have definite, valuable characteristics. They contain 40 per cent high-quality protein, 20 per cent multi-purpose oil; they can be shipped immediately; the United States produces a considerable quantity of this crop and has set

up a remarkable shipping system close to where it is grown.

Historically, soybean production in the United States has shown that weather has little effect on the country's total crop. There were severe damages to the entire crop in 1974 when floods, droughts, and early frosts lowered the average yield per acre by 14 per cent. It is most unlikely that these factors will again come into play all at the same time since soybean farming is carried out over a vast region of widely-varying climates.

The United States could produce about 20 million additional tons of soybeans by converting to this use the two million acres presently planted to cotton for export and the seven million acres devoted to corn for foreign markets. Iowa and Illinois alone with their 21 million acres of rich soil could produce more soybeans than the total U.S. crop in 1975.

It is not an exaggeration to consider the United States as the major source of protein from soybeans because, with Brazil, it is the only country liable to produce this crop profitably for world markets. Brazil, however, is at a disadvantage with more transportation difficulties and a soil which requires more costly fertilizers.

American farmers and researchers have increased the per-acre yield of soybeans from 740 kilos in 1924 to an average of 1,800 kilos between 1970 to 1975. In the future new harvesting techniques and designs in machinery may increase the per-acre yield of soybeans from 70 to 200 kilos, not to mention an additional 10 per cent increase from the new methods of fertilizing recently developed at Ames.

At present, agricultural scientists are attempting to find out why the soybean plant yields only 30

per cent of its capacity. As soon as the answer is found, soybean production in the United States could increase radically.

If the United States has the potential to increase considerably its actual soybean production, it is also capable of growing more wheat. Don Woodward, President of the National Association of Wheat Growers, pointed this out clearly at the Third World Congress of Agricultural Journalists. At the beginning of July, the expected wheat crop for 1976 was two billion bushels, that is 30 per cent more than five years ago and twice as much as 30 years ago. Faced with production almost three times greater than domestic needs (estimated at 750 million bushels), American producers have turned to exports and are now asking for open markets and increased unrestricted sales. In this respect, Don Woodward approves of the present shift in agricultural policy as set forth by Secretary L. Butz.

What about corn and meat producers?

Speaking on behalf of corn producers, John Curry, President of the National Corn Growers' Association, is willing to produce more of this crop but on the condition that first the following five problems be resolved; namely, lack of interest in soil conservation, appraisal of land prices, absence of research, lack of confidence, and a belief in the "free meal".

Mr. Curry deplores the fact that the best soil in the United States (in Nebraska and in Missouri) is being eroded and that the use made of the soil today is detrimental to its conservation. He feels that Americans have reached a point in history where they will have to opt either to continue at the present rate and bring about sociological and economic chaos or, while there is still time,

equip themselves for survival and realistically reassess present customs and guiding principles. If Americans choose the latter, they will again be able to produce sufficient foods and fibres to make up for shortages in other areas.

Meanwhile, exporters of meat, represented at the Congress by Peter Marble, Chairman of the U.S. Meat Export Federation, see in international free trade a solution to the world food shortage. The United States produces approximately 25 per cent of the world's supply of beef and imports 25-30 per cent of all the beef marketed in the world. It exports only 0.2 per cent of its beef, two per cent of its pork, and less than one per cent of its lamb. If American beef, pork, and lamb imports exceed exports, why then are producers looking to export markets?

The speaker listed four aims related to this attitude:

1. stabilization of prices through diversification of markets;
2. guarantee of reciprocal trade conditions among all nations;
3. availability of markets for secondary products which are in limited demand in the United States;
4. exports of superior quality products at lower prices to non-competitive nations in this field.

We can deliver if —

Allan Grant, President of the American Farm Bureau Federation, believes that the sound economy of any country depends on its ability to trade with its neighbours. Favourable reciprocal trade promotes understanding and respect among nations and is in the best interests of world peace. Agreements which fix international market prices and distribute export trade are opposed to the interests of international trade

nce they penalize efficient producers and encourage low-profit production. They limit the opportunity to develop markets and reduce the possibility of increasing the net income by better meeting the demand of actual consumption.

The President of the American Farm Bureau Federation indicated that the clearance of the greater part of farm surpluses resulting from the nation's program of price support is one of the events of the past few years which has brought about a marked change in the orientation of his country's agricultural policies. His organization believes in a market-oriented agriculture as a more efficient solution to economic problems rather than in any form of State intervention. Agriculture, which makes up a considerable portion of American exports, has important interests in maintaining a large volume of international trade that only a free agriculture can supply adequately. The United States will produce and deliver if there are free markets.

Lonny Dechant, President of the National Farmers' Union, presented another point of view by stating that the present agricultural policy of the United States provides no guarantee for production and trade. Agricultural policy changes of the past few years have only freed producers to produce. If nothing more is done, most of them will simply be free to go bankrupt. This type of agriculture characterized by booms and bankruptcies, surpluses and famines hardly helps in obtaining and maintaining principal export markets.

In summary, once the United States has resolved its production problems, it will be able to deliver

it has customers who are able to pay;

2. its producers can survive economically;
3. its surpluses are used to make up sufficient stocks to ensure self-sufficiency;
4. the government allows exports and does not play the "low-cost food" political game;
5. the United States supports constructive policies for international trade.
6. The trend to protectionism and food self-sufficiency is checked;
7. there are transport services and a substructure for shipping food where needed.

From this study day devoted to "One World: Let's Trade", the journalists in attendance were able to extract the following message: the United States wants to, can and must help the underprivileged nations of the world, but such aid must not have unfavourable repercussions for American producers who are in full form.

II The Conferees Take to the Road

IFAJ Day with its Assembly of Delegates and general annual meeting followed the day devoted to World Trade. Next came Farm Family Day on which the journalists in small groups of three or four spent a few hours with their hosts as they visited their farms and homes and enjoyed a picnic together.

On Monday, July 5, the first day of the organized tours, the group took to the road. Quebec delegates agreed to visit the West in order to familiarize themselves with agriculture in Iowa and Nebraska. The program included visits to swine breeders, feedlots, laboratories and trial plots, systems of irrigation and farm machinery plants. This trip to the heart of American farming made for a better understanding of agriculture and of how it operates in the United States.

To the delegates, Iowa was an immense prairie with soybean and corn crops competing for most of the arable land. With 13 million acres of farms and dark, fertile, loamy soil, this state ranks among the first for its farm products. Soybeans, this modern miracle of American agriculture, rivals with corn for the land whose value exceeds \$2,000 per acre. Iowa has an estimated 10 million acres suited to soybean farming.

The State uses its corn to feed its 7.5 million cattle (including two million beef cattle and only 400,000 dairy cows) and its 12 million hogs. It is also used to feed its 11 million chickens and hens and its six million turkeys. As for Nebraska's livestock, it is made up mainly of beef cattle for which the state is well-known. Nebraska markets some 3.5 million head raised on huge ranches and fattened at its 15,000 feedlots located especially in the western part of the State where wheat is also of major importance.

At Kearney, the conferees visited one such feedlot with a capacity of 11,500 head of cattle, and containing 46 adjacent pens, each capable of holding 250 animals. The required feed consisting mainly of silage and forage corn is stored in six huge horizontal silos, which are filled with local products. This feedlot's topography and drainage contribute to its remarkable cleanliness.

While wheat and beef constitute the agricultural wealth of western Nebraska, grain-corn, soybeans, sorghum and pork make up that of the eastern part of the State. Out of a total of about 20 million acres taken up by some 70,000 farmers, Nebraska has 2.4 million acres seeded to corn, 1.1 million to wheat, 0.8 million to sorghum and 0.5 million to soybeans. Natural grasslands and alfalfa cover 1.0 and 0.7 million acres

respectively. Less than half of the agricultural land is farmed, but the virgin prairie is not any less of an asset to agriculture in this state since it is used as grazing land for beef cattle.

From May to October, Iowa and Nebraska experience temperatures ranging from 20° to 35°C and a very low rainfall. How can such a climate produce bountiful crops? Irrigation is the key to the agricultural wealth of these states. The rational use of surface and subsurface water-levels is the basis of a surprising method of irrigation suited to the soil and water resources of this area. Nebraska has over two million acres of irrigated land and an increase of millions of acres is expected in the coming years as this State has approximately eight million acres of irrigable land. Therefore, prospects for further development of the beef cattle industry are bright as irrigation will contribute to improve grazing land and better forage. Irrigation is in full force also in Iowa where corn farming is reaping its advantages.

Crops were first irrigated by diverting water courses and flooding whereas new techniques help to conserve water. The conferees were shown several irrigation systems in operation in Iowa and in Nebraska, but the one which caught their attention was on a self-propelled central pivot which irrigates by rotation, forming huge circles of a 1,500-foot radius, and which is turned on and off automatically by a temperature and humidity-recording system. The water used is pumped in from artesian wells. These irrigation systems, which resemble giant sprinklers and create a rain affect, average about \$35,000 each. The agricultural journalists noticed that on each of the farms visited there were not fewer than five such sprinklers.

Irrigation has become an important factor in the race towards mechanization, a process which has infiltrated all branches of American agriculture which is among the world's most mechanized. The delegates at Ames were told that in Iowa it is now possible for a single person to seed 400 acres of land to cereal crops. For this an 18-row seeder is used which completes the work in six days. Elsewhere, the use of direct seeding has cut down on labour and has reduced help by four or five times. An acre of corn requires only 11 hours of work per year and an acre of soybeans only nine. The replacement of manpower by the machine is the constant concern of the American farmer. But mechanization is also helping to increase farm revenue. A 1975 study of 40 farms in eastern Nebraska indicated an average of \$400,000 in investment per farm.

An increase in the value and area of farms has complicated their transfer from one generation to the next. Faced with financial and farm-transfer difficulties, many farmers are incorporating their operations to ensure the survival and efficiency of their farms which are still basically traditional family enterprises.

The End of a Fine Tour

The trip to Nebraska ended at North Platte, where the conferees boarded a plane for Chicago, via Moline, Illinois, to visit the international headquarters of Deere and Company in an enchanting setting. The highlight of the stop was a tour of the farm implement museum erected to the memory of John Deere, the blacksmith who founded the company 139 years ago and built the first steel

plow to which heavy soil would not stick. The collection of newspaper advertisements in the Display Room enabled the journalists to follow the evolution in the presentation of farm machinery advertising over more than a century.

On the morning of July 9, the East and the West tour groups joined for Farewell Day, which included a visit to the Chicago Board of Trade and Museum of Science and Industry, a farewell luncheon and pictorial tours of farms in California, the Great Plains region, and Southern United States.

What did the agricultural journalists derive from the congress which has been merely outlined here? Through its representatives each country probably saw the event from a different angle. In addition to returning with views that they would like to see extended in their province, the Quebec delegation came away with a good understanding of the present American agricultural policy, which, without being unchanging, has repercussions on its markets.

The international representatives at the Third World Congress came away proud of belonging to a profession which assumes responsibility in a mass-media world where its role is to spread scientific knowledge, popularize new techniques, form attitudes, conserve natural resources, and protect the environment with the ultimate aim of ensuring adequate food for all nations of the world.

Mrs. Herbert Millar Ellard

It is with sorrow that we announce the death on November 27, 1976, in Ottawa of Mrs. Herbert Millar Ellard. Mrs. Ellard, who was a Charter Member and first President of Wright Branch in Gatineau County, was President of the Quebec Women's Institutes from 1960-64.

Dorothy Ellard was born in Barnett, London, England, on July 28, 1893. She received her early education in that country and came to Canada with her parents in her late teens. Mrs. Ellard was a graduate R.N. of the Lady Stanley Institute Training School for Nurses, Ottawa.

In 1917 she married Herbert Ellard, a lumberman and farmer from Pickanock in Gatineau County. After marriage, Mrs. Ellard lived in Wright where she formed a branch of the Women's Institutes in 1940, becoming its first President.



Mrs. Ellard also served as County President and, during World War II, directed the QWI War Services effort, heading the special committee set up for that purpose. Later she became Convener of Welfare and Health. At the end of her second term in that office, Mrs. Ellard was elected 2nd Vice President of the Quebec Women's Institutes, going on to 1st Vice-President and was elected President in 1960.

Mrs. Ellard was Chairman of the National Committee, formed by the FWIC to arrange for the setting up of National Headquarters, and in 1959 she attended the Triennial Conference of ACWW, which was held in Edinburgh, Scotland. Mrs. Ellard represented both her own province and the FWIC on the Canadian Broadcasting League.

The H.M.C.S. Gatineau was Mrs. Ellard's greatest project. She had all the Gatineau branches working toward the outfitting and comforts of the 225 men on board. The bell from the Gatineau was presented to the Gatineau County Women's Institutes and Gatineau County Council and hangs in the chambers of the Gatineau County Council in Maniwaki.

Mrs. Ellard was given a Life Membership for her record of service and active interest in the Quebec Women's Institutes.

Semi Annual Board Meeting

The Semi-Annual Board Meeting was held at the Sheraton Mount Royal Hotel on November 26 and 27 with 22 members attending. Regrettably Miss Edna Smith, Provincial President, and Mrs. Doris Cascadden, Provincial Treasurer, were unable to attend due to ill health. A more detailed report will be sent to the branches.

There had been three requests for Members' Conferences. Compton County invited members from Megantic and Quebec Counties. Sherbrooke invited Stanstead and Richmond Counties. Both Conferences proved very

successful. The one at Matagami did not materialize, but the delegate from Abitibi North, Mrs. Barbara Hendriks, requested that one be planned for the future.

We were reminded that 25 different stamps were to be collected for the stamp stall at the ACWW Conference in Nairobi, Kenya. Try to get pictures of birds, animals, flowers, etc. Only save perfect stamps, not those stained or dirty. Put them in a transparent envelope and bring to May Convention.

Mr. Rainsburg, Director for Field Services in Canada for UNICEF was guest speaker. He was ac-

companied by Dr. Jean Boucher, Director-General of UNICEF in Quebec. He said the organization started in 1946 and that there had always been a very good relationship between Women's Institute and UNICEF. They appreciate the interest the WI has taken in their work and he would like this thought passed on to the branches. **UNICEF** started out as an emergency fund but has taken on a developmental aspect. In 1961 they received a Nobel prize. There are about 35,000 volunteers — 99.9 per cent of the work is voluntary. Last year at Hallowe'en \$1,000,000 was raised. Money raised in Canada is matched by the Canadian government. **UNICEF**

works closely with CanSave and there is no duplication of work. Dr. Boucher endorsed Mr. Rainsburg's remarks. An invitation was extended to anyone travelling to visit the Regional office of the country.

We were encouraged to collect Dominion slips, bread tags, and used stamps. The Lions Club will make good use of eye glasses. There was a request for money for the building campaign at Macdonald College. It was unanimous that the Women's Institute support this project.

A volume of a year's issues of Macdonald Journals was passed around. WI news has been in the Journal since its beginning in 1940. It was decided to have the Journals bound on a yearly basis into one volume. Mrs. Coates asked for slides on Quebec to be sent in for the Executive Meeting in February.

Mrs. Gwen Parker gave an excellent report on the Plowing Match at Macdonald College. The financial returns were satisfactory and they will be divided among various Women's Institute projects. Mrs. Kilgour presented the QWI awards at Macdonald College recently.

Mrs. Jas. Robertson, Hemmingford, Area Vice-President FWIC, will represent QWI at the ACWW Conference in Nairobi, Kenya, in October 1977. The Executive urged members to take part in the handicraft competitions. Unless more interest is shown, we may lose the support of J & P Coats. (Liquid embroidery is not acceptable.) Also we are asked to send in the names of new members. Another request is to please read everything that comes from the office very carefully — have it read at the meetings. The dates for the Annual Convention are May 30, 31, Executive and Board Meetings respectively, and Convention, June 1 and 2. The secret-

ary asked that room accommodation needed for the spring Convention be made by the end of April.

The members present signed "get well" cards: one for our President, Miss Edna Smith and the other for our Treasurer, Mrs. Doris Cascadden. Mrs. Coates and Mrs. Kilgour brought us highlights from the Salon of Food and Agriculture. There was no bilingual day this year.

Resolutions Committee: Missisquoi, Pontiac, and Montcalm Counties — the Presidents of these counties will form the committee. Mrs. Merlin Davis of Sutton will be the chair person.

Special news from the Magdalen Islands

We are very pleased to hear from our sister branch of Grosse Isle in the Magdalen Islands. Due to the absence of the publicity convener, Mrs. Grace Rankin, the President of the Branch, Mrs. Ernest Keating, wrote saying that they were not able to send a delegate to the Semi-Annual Board Meeting in November. However, Mrs. Keating enclosed an account of their year's work. "During the month of March we filled eight handi bags and shipped them to CanSave. At the same meeting we had a speaker from our local C.L.S.C. whose topic was Health and Welfare. Then in April we got a summary of the amount of garden seeds needed for the local students. The Agriculture Convener distributed these seeds in May. Two of our members were able to attend the June convention in Charlottetown. In July, these same ladies gave an account of their trip. Our members prepared handicrafts to show at the Fall Fair during August.

Also incentives were offered to the students to encourage them to bring their pets and their garden vegetables to the fair which was

held on September 11. In October we ordered a citizenship trophy to be awarded to the most deserving student at the Grosse Isle School."

Thank you, Mrs. Keating, for telling us about your activities of the past few months. The enthusiasm shown at your inaugural meeting of a very few years ago is still evident. Your report shows accomplishments of which any branch might be proud. Although there are miles between us, the same aims and impulses link us in a common bond.

Awards Banquet

On November 11, I had the pleasure of representing Quebec Women's Institutes at the Scholastic Awards Banquet at Macdonald College. After a delicious dinner, with 120 in attendance, the presentations were made. The Frederica Campbell MacFarlane Scholarship, which is given annually in memory of the late Mrs. MacFarlane, superintendent of the Quebec Women's Institutes from 1913 to 1919, was won this year by Miss Marie-France Lohé from St. Armand. She is in her second year, School of Food Science, and is looking forward to the time when she will be able to make her mark in her field.

The Mrs. Alfred Watt Memorial Prize, given in memory of a distinguished Canadian who introduced the Institute in England and Scotland, was won by Miss Christine Pelletier of St. Bruno. She is in her third year in Food Science.

Both these girls are of French parentage and are perfectly bilingual.

The Quebec Women's Institute Bursary, given to a farm boy entering his second year in the Diploma Program was won by Mr. David Roy of Buckingham. David has mixed feelings about

returning to the farm at the end of the year. His father was hoping to take him into partnership, but with David's training there are many opportunities with the feed companies. He would like to be able to purchase many of the new machines and bring the farm up-to-date, but with the present prices he hardly knew what was advisable.

They were all very appreciative of their awards.

Mrs. Walter Kilgour
and Vice-President, QWI

Tea and Bazaar

A successful undertaking of Richmond County for the last two years has been a tea and bazaar held each September. Emphasis is on the produce table, which literally sags under the weight of home baking, home-grown fruits, vegetables, flowers, and plants, and homemade pickles, jams, and jellies. There is also a well-stocked handicraft and miscellaneous sale table. Sandwiches, pickles, and squares are served with tea in the attractive hall of the Richmond branch of the Royal Canadian Legion.

Over \$500 has been realized annually by this project and the goodwill generated by the contribution and co-operation of the eight branches working together is equally important. The hall has already been reserved for a similar occasion in 1977.

Compton County WI Bursaries

This year on Awards night at Alexander Galt Regional High School five Compton County students received bursaries of \$125 each. These five students were chosen from 12 applications at a recent meeting of the C.C.W.I. Bursary Committee.

The Hon. C. D. French Bursary was awarded to Shirley Morrison,

daughter of Mr. and Mrs. Lloyd Morrison of Sawyerville.

A bursary in memory of the late Mrs. George Parsons was awarded to Cynthia LaRocque, daughter of Mr. and Mrs. J. P. LaRocque of Bury.

Three W. I. bursaries were awarded to Melanie Wintle, daughter of Mr. and Mrs. Gilbert Wintle of Gould, Joy MacDonald, daughter of Mr. and Mrs. John MacDonald of Sawyerville, and Margaret Bailey, daughter of Mr. and Mrs. Eric Bailey also of Sawyerville. Margaret Bailey is attending Liberty Baptist College in Lynchburg, Virginia, while the other four are attending Champlain Regional College in Lennoxville.

Dear W.I. Members:

We are barely launched into 1977. Our New Year's Resolutions are still new, shiny, and unbroken. Memories of the Christmas season, and the time of the giving and receiving of gifts still linger. We all were part of it. But let us ask what made for us the fondest memories of the past month. Perhaps it was something not so tangible, but nevertheless very real. It could have been when little "Timmy" — your very own little "Timmy" — said his first recitation at the Christmas concert. Maybe it was when you helped someone place a blond, blue-eyed doll under the family tree. Or it could have been when a teenager, home for the holidays, burst into the kitchen with a "Hi, Mom." To hear the choir sing one of your favourite carols also evokes fond thoughts. There are many happy moments we tuck away in our memory chest.

There are great responsibilities and challenges for us in the year that lies ahead. That can be said of all levels of life in our province. It is just as true of our Women's Institutes as it is of any body or group. We have a responsibility,

a charge, a challenge — call it what you wish. The year ahead is an important one. We are looking forward to receiving more "specials" from the different branches. Members are apt to think "Oh there's nothing of much importance to write about here, not in this town or village."

But there is. Our area is so wide and varied. Fall fairs are the same basically, but each community has a different approach. Wouldn't you enjoy reading an account of the September 11 fair at Grosse Isle — how many children exhibited? What pets were shown, or something unexpected a young exhibitor said or did? I remember this little incident from the school fair sponsored by the Megantic County W.I. a year or two ago.

There was one class in the flower division — three nasturtiums in a small bottle. On my way to the hall, I met a six-year old, walking dejectedly along the sidewalk to her mom's car. I asked what the trouble was and she replied, "I've lost one of my flowers."

It was found on the back seat of the car not too much the worse for wear. But a happy little girl added the third nasturtium to the two lonely ones in the small jar on the table.

There are many noteworthy activity in our communities to be recounted. So write about them. Mark them special, and if you prefer, sign your name. That will also add to the interest.

Some items deserve special mention. **Gatineau County** served cookies and tea at the Women's Institute Tea Room, Ottawa Winter Fair. This is a joint project with the Ontario W.I.'s of Carleton County.

Frontier Branch reported receiving a cheque from the estate of the late Amy Gaston a former member. **East Clifton** held an exchange and sampling of international recipes. Some of the items were Scotch tarts, Queen Elizabeth cake, German Christmas

cookies, Zucchini bread and Scottish tea scones.

From **Fordyce** we learn that Mrs. Longeway, Home Economics Convener, read articles on "A Compressor for Plants," and "Our Indian Heritage." She then asked members to sample Squaw Bread, which she had made from an Indian recipe. Perhaps at a later date we will have the recipe from Mrs. Longeway.

In a recent edition of the Montreal Star, there was an article describing a program to aid a Downs' syndrome child, who suffers from a disease commonly known as Mongolism. It is imperative that these children receive special training. This proved more than the parents could cope with on their own, and an appeal was sent out for volunteers. Lucy French and Joan Boara, WI members from **Baldwin Cartier**, are among the volunteers and have helped to find others. Lucy French is our Provincial Convener of Citizenship.

Some branches were fortunate to have interesting speakers. **Grenville** had Mr. Reid Drouin, Principal of Rouge River School, who spoke on the metric system. A local nurse spoke at Huntingdon on how to treat a person with a heart attack. Mrs. Atto from the Sherbrooke Hospital spoke on home nursing care at **Brookbury** and at **Canterbury** Helen Groom's subject was the health of youth. She warned mothers to prepare well-balanced meals to counter-balance the junk foods that children sometimes eat. **Lennoxville** had as a guest speaker Mr. C. Dougherty. He spoke on pollution with many of his remarks based on garbage disposal. At **Quyon** Mr. Donald Lavallee proved to be an interesting speaker.

Members answered the roll call at **Black Cape** by saying a few words in French. The branch catered for a buffet for a softball team,

and sent a special gift for their foster child at Christmas. Plans were also made for cheer baskets for senior citizens in a community centre in Maria. From **New Richmond West** we learn that knitting has been done for CanSave and that life membership pins were given to four members. The Agriculture Convener at **Matapedia** displayed a pepper plant. Each member was given seeds. **Grand Cascapedia** handed in jams, jellies, and pickles to be donated to Mary's Rest Home in St. Jules. A donation of \$50 each was given to two needy families.

Aylmer East celebrated their 51st anniversary meeting at the home of Mrs. R. Radmore. Two charter members, Miss Janet Riley and Mrs. Muriel Shaw attended.

Some practical hints from **Aubrey-Riverfield**: gum may be taken off with ice cubes; tooth paste will clean silver; the juice of 1 lemon and 1 teaspoon salt will clean copper.

Dewittville entertained husbands and tenants at the Walshaven Apartments at a bingo when groceries were donated as prizes and lunch served. At the **Hemmingford** meeting, members were advised to have pieces of property stamped for identification in case of theft. **Howick** celebrated their 65th Anniversary and **Huntingdon** gave donations to Meals-on-Wheels and some ladies undertook to make desserts for same.

Bury had a busy month. The ladies prepared and served a Hallowe'en dinner to 127 students and their teachers at Pope Memorial School. Menu was hot dogs, french fries, homemade cookies, orange jellied dessert with marshmallow faces and chocolate milk. The dining area wall was decorated with Jack-O-Lanterns and candles in the shape of Jack-O-Lanterns were used as a centrepiece. Orange-coloured napkins in

Hallowe'en napkin holders made by the children were used. The same branch gave \$50 to St. Paul Rest Home toward refurbishings. Mrs. Lillian Olson received a 25-year-pin.

Richmond Young Women gave donations to UNICEF, Quebec Extension Fund, Quebec Service Fund, UNESCO Coupon 569, Cec Butters' Home, and to Save Sight. They also gave two Life Memberships. Each member brought a guest to the November meeting and one lady joined.

Cleveland held a meeting at the Wales Home to entertain former members and friends. Also entertained their families and friends at a potluck supper. Mrs. Walter Parkes, County President, and her husband were special guests.

At **Gore** the needlepoint picture project for 1976 International Competition was judged at County level: 1st Mrs. Dorothy Oakley, 2nd Mrs. Lyall Newell, 3rd Mrs. Neil Fowler. A poem, Trick or Treat, written by a Melbourne resident, Madge Montgomery, was read.

Grenville reports that the attendance at their meetings is very good. As a result it is difficult to hold them in private homes. Other meeting places were discussed. Pickles and jams were sent to the Home in St. Philippe and 25 pairs of crocheted and knitted slippers were sent to a Verdun hospital. **Arundel** entertained a speaker whose subject was insurance.

Some mottoes sent in: Food for the soul can be as heart warming as food for the stomach (Matapedia); No man is rich enough to be without a neighbour (from Shipton), and I like this one — When love and skill work together, expect a masterpiece.

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QWI Publicity Convener

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